

# Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.



# COURSE SYLLABUS

#### **BMIS 530**

SYSTEMS ANALYSIS, MODELING, AND DESIGN

#### **COURSE DESCRIPTION**

The course will provide a practical look at the current methodologies and design techniques necessary for system implementation, operation and maintenance. These include the systems development life cycle (SDLC), rapid application development (RAD), agile development, object-oriented analysis and design, prototyping, visual development and the human computer interface (HCI).

#### RATIONALE

The purpose of this course is to provide the student with skills in various computer systems modeling and design processes, along with business awareness, in order to facilitate the alignment of technology and its functions within business. This course will cover the concepts, skills, methodologies, techniques, tools, and perspectives that are needed for the systems analyst to successfully develop information systems that align with a business's overall organizational strategy. It is important for the student who will be a future IT or business professional to understand the role IT systems play in supporting organizations and management initiatives in order to ensure that IT systems can fulfill their intended role within the organization.

## I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the <u>Academic Course Catalog</u>.

#### II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: <a href="http://bookstore.mbsdirect.net/liberty.htm">http://bookstore.mbsdirect.net/liberty.htm</a>

#### III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Microsoft Office

#### IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

- A. Discuss the relevance of course material and the use of technology to a biblical worldview.
- B. Explain the various stages and methods of the systems development life cycle.
- C. Analyze modern conceptual modeling techniques for systems analysis and design.
- D. Apply rapid application development methodologies.
- E. Construct an object-oriented analysis, design, and system prototype.
- F. Illustrate the management issues involved in systems analysis and design.

## V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations/notes
- B. Course Requirements Checklist

After reading the Course Syllabus and <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (3)

Discussion boards are collaborative learning experiences. Therefore, the student is required to provide a thread in response to the provided topic for each forum.

D. Systems Analysis and Redesign Project

In this 3-phase project, the student will analyze an organization and its associated systems in order to determine which processes need to be redesigned for the organization to operate more effectively.

E. Exams (3)

The exams will consist of multiple-choice, true/false, or essay questions based on the specified reading.

#### VI. COURSE GRADING AND POLICIES

#### A. Points

Course Requirements Checklist	10
Discussion Board Forums (2 @ 30 pts & 1 @ 40 pts)	100
Systems Analysis and Redesign Project	
Phase 1	200
Phase 2	200
Phase 3	200
Exam 1	100
Exam 2	100
Exam 3	100
Total	1010

## B. Scale

$$A = 940-1010$$
  $A = 920-939$   $B = 900-919$   $B = 860-899$   $B = 840-859$   $C = 820-839$   $C = 780-819$   $C = 760-779$   $C = 760-779$ 

## C. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at <u>LUOODAS@liberty.edu</u> to make arrangements for academic accommodations. Further information can be found at <u>www.liberty.edu/disabilitysupport.</u>



# COURSE SCHEDULE

# **BMIS 530**

Textbook: George & Valacich, Modern Systems Analysis and Design (2017).

MODULE/ WEEK	READING & STUDY	Assignments	POINTS
1	George & Valacich: chs. 1–3 1 presentation	Course Requirements Checklist Graduate Level Business Program Assessment Class Introductions DB Forum 1	10 0 0 30
2	George & Valacich: chs. 4–5 1 presentation	Systems Analysis Project – Phase 1	200
3	George & Valacich: chs. 6–7 (7A) 1 presentation	DB Forum 2 Exam 1	30 100
4	George & Valacich: chs. 7 (B–C), 8 1 presentation	Systems Analysis Project – Phase 2	200
5	George & Valacich: ch. 9 1 presentation	DB Forum 3	40
6	George & Valacich: ch. 10-12 1 presentation	Exam 2	100
7	George & Valacich: ch. 13-14 1 presentation	Systems Analysis Project – Phase 3	200
8	George & Valacich: chs. 1-14 1 presentation	Exam 3	100
Total			1010

DB = Discussion Board

**NOTE**: Module/Week one begins on Monday and ends at 11:59 p.m. (ET) on Friday. Modules/Weeks 2-8 begin on Saturday and end at 11:59 p.m. (ET) on Friday.